



BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Quadrennial Planning Process

5-GF-191

Renewable Resource Guidelines

**ORDER**

2005 Wisconsin Act 141 (Act 141) requires the Commission to conduct a review of energy efficiency and renewable resource programs at least once every four years. The Commission is required to evaluate energy efficiency and renewable resource programs and determine their appropriate goals, priorities, and measurable targets.

The Commission addressed these issues in docket 5-GF-191, the Quadrennial Planning Process. One decision made in this docket was that the cost-effectiveness of customer-sited renewable resource measures and programs should be determined in the same manner as energy efficiency measures and programs, as this will allow a direct comparison between these valuable resources. However, the Commission recognized that customer-sited renewable resources have specific attributes that are not adequately reflected in the standard cost-effectiveness test, the Total Resource Cost Test. The Commission therefore determined it appropriate for public policy to guide decisions regarding the incorporation of renewable resources in the portfolio of Focus on Energy programs and directed Commission staff to develop proposed criteria to guide these decisions.

At its open meeting of October 20, 2011, the Commission considered and modified the proposed criteria developed by Commission staff. The attached criteria are to be used to guide decisions regarding the incorporation of renewable resource measures in the portfolio of Focus

on Energy programs. The Program Administrator shall work with Commission staff to score non-cost-effective renewable resource measures based on these criteria. The results of this screening, as well as the cost-effectiveness of the programs resulting from the rebids of the Mass Markets and Targeted Markets portfolios, shall be used by the Program Administrator, in collaboration with Commission staff, to propose the non-cost-effective renewable resource measures to include in the Focus on Energy programs and a budget to capture these resources. The proposed measures and budget shall be brought to the Commission for approval before the measures are included in the Focus on Energy programs.

**It is Ordered:**

1. The attached criteria (Attachment A) shall be used to score, based on specific attributes of renewable resources that are not adequately reflected in the standard cost-effectiveness test, non-cost-effective renewable resource measures.
2. The Program Administrator shall work with Commission staff to develop a list of renewable resource measures to include in the Focus on Energy programs, and a corresponding budget to capture these renewable resources. The results of the renewable resource measure scores, as well as results of Focus on Energy Mass Markets and Targeted Markets implementer rebids should be the basis for the proposed measures and budget.
3. Final approval of the non-cost-effective renewable resource measures and the budget allocated to these measures shall be received from the Commission before these measures are included in the Focus on Energy programs.

Docket 5-GF-191

4. This Order takes effect on the day after mailing.
5. Jurisdiction is retained.

Dated at Madison, Wisconsin, October 27, 2011

By the Commission:

  
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Sandra J. Paske  
Secretary to the Commission

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See attached Notice of Appeal Rights

# Expanded Cost-Effectiveness Evaluation of Focus Renewable Resource Measures

Measure Name:

Non-Monetized Benefits not Included in Simple TRC

	SCORE	-2	-1	0	+1	+2
Measure's Focus cost-effectiveness is good		Measure's cost effectiveness is <0.2	Measure's cost effectiveness is between 0.2 and 0.29	Measure's cost effectiveness is between 0.3 and 0.49	Measure's cost effectiveness is between 0.5 and 0.7	Measure's cost effectiveness is >0.7
Technology Risk: Technology's installation, operation & performance issues are known, product certifications exist		Tech is unknown, has few or no installations in WI that have undergone Focus M&V	Tech has installations in WI but M&V shows performance and energy savings are unreliable	Tech's issues are known but it is unknown if they can be resolved near term via more product development	Tech has energy savings reliability issues and is showing gradual improvement	Tech is well understood with few performance or energy savings reliability issues.
Technology Maturity: The technology is not undergoing rapid upgrades that affect cost or performance.		Tech is very early stage, undergoing many changes, with no commercial installations.	Tech has one or two commercial installs, but has many improvements needed.	Tech is mature, many installations and few improvements planned.	Tech is undergoing small but steady improvements in performance	Tech is making large performance improvements every few years.
Supply-side market for technology is mature (plenty of sellers & choices) & seller/installer certifications exist		No certified sellers serving WI, few product choices	Five or fewer sellers serving WI, no certifications exist	More than five sellers & products in WI but weak or no certifications	More than five sellers & products in WI with draft certifications	More than five sellers & products in WI with national certifications
Customer Payback: Measure's simple payback is within one measure lifetime (value of energy savings compared to the customer's after-tax investment).		Payback is greater than 2 measure lifetimes	Payback is between 1.5 and 2 measure lifetimes	Payback is between one and 1.5 measure lifetimes	Payback is between 15 years and one measure lifetime	Payback is between 2 and 15 years.
Additional Customer Maintenance: Costs to Owner not included in normal payback calculation		Over measure life, non-fuel O&M costs can be >=80% value of energy produced/saved	Over measure life, non-fuel O&M costs are between 50-79% of the value of energy produced/saved	Over measure life, non-fuel O&M costs are 30-49% of the value of energy produced/saved	Over measure life, non-fuel O&M costs are 11-29% of the value of energy produced/saved	Over measure life, non-fuel O&M costs are <10% of the value of energy produced/saved
Federal Tax Credit Returned to WI		N/A	N/A	No tax credits are available	For the customer segment, between 0-49% of tax credits return to WI entities	50-100% of federal tax credit returns to WI-based entities in the customer segment

Measure produces or can cost-effectively be designed to produce primarily on-peak kWh (on-peak hours = 8 am to 9 pm M-F, about 40% of all hours)

Support Jobs after system installation such as fuel collection & processing in WI. O&M jobs should be excluded from consideration since conventional resources also have large O&M components

Increased Diversity of Energy Supply

Uses waste stream as a fuel

Helps meet energy shortfalls/emergencies

Creates renewable byproducts other than energy (i.e. biogas systems produce fertilizer, soil amendments and bedding)

TOTAL SCORE FOR NON-MONETARY BENEFITS

Unknown what percent of energy is produced on-peak, measure can't be dispatched, storage is not cost effective	Measure produces between <30% of its energy on-peak, can't be dispatched and fuel or energy storage is not cost effective	Measure produces between 30% and 44% of its energy on-peak but may improve via fuel or energy storage	Measure produces between 45% and 59% of its energy on-peak	Measure produces >= 60% of its energy on-peak
N/A	N/A	Has no job impacts above conventional resources.	Support of jobs is limited. (For example, biogas CHP systems require more O&M and fuel handling than the "zero" category, but not enough for the +2 category.)	Biomass thermal and CHP would be prime candidates for their biomass harvest, transport and process jobs.
N/A	N/A	Increases supply diversity but in increments too small to be meaningful <100 kW or <10,000 therms/yr	Increases supply diversity in increments between 100 kW and 300 kW or between 10,000 therms/yr and 100,000 therms/yr	Increases supply diversity in increments > 300 kW or >100,000 therms/yr
N/A	NA	N/A	Energy production is an easy disposal or mass reduction method (i.e. black liquor boilers & waste biomass	Energy production makes wastewater more valuable for other uses or solves important waste management issues (i.e. biogas)
N/A	N/A	Helps meet energy shortfalls but in increments too small to be meaningful <100 kW or <10,000 therms/yr (i.e. solar, small wind)	Helps meet energy shortfalls in increments between 100 kW and 300 kW or between 10,000 therms/yr and 100,000 therms/yr	Helps meet energy shortfalls in increments > 300 kW or >100,000 therms/yr
Creates toxic byproducts that must be handled specially and disposed of properly	Byproducts that must be handled specially and disposed of properly	Byproducts can be safely landfilled or land spread	Value of byproducts is up to 10% of the value of energy produced	Value of byproducts is up to >10% of the value of energy produced

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PUBLIC SERVICE COMMISSION OF WISCONSIN  
610 North Whitney Way  
P.O. Box 7854  
Madison, Wisconsin 53707-7854

**NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE  
TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE  
PARTY TO BE NAMED AS RESPONDENT**

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

*PETITION FOR REHEARING*

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of mailing of this decision, as provided in Wis. Stat. § 227.49. The mailing date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

*PETITION FOR JUDICIAL REVIEW*

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of mailing of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of mailing of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission mailed its original decision.<sup>1</sup> The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: December 17, 2008

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<sup>1</sup> See *State v. Currier*, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.